

REMARKS

Claims 1-4, 6-13 and 15-21 and 23-24 are pending in the application. Claims 1, 6-8, 11, 15-17 and 20 have been amended, and claims 5, 14 and 22 have been cancelled.

Claim Rejections – 35 U.S.C. §102(e)

The Examiner rejected claims 1-24 under 35 USC 102(e) as being anticipated by Chin (U.S. Patent No. 6,608,625). Applicant respectfully disagrees with the Examiner's rejection. In particular, Chin fails to teach or suggest a "pointer cache system further comprises a decoupling section to create a non-blocking pointer cache system," as claimed in independent claim 5, 14 and 22 and the claims that depend therefrom.

In order to further optimize performance, the cache tags are separated from the cache data by a decoupling FIFO. This, in essence, makes the cache a non-blocking cache. The cache is therefore able to hide some of the memory latency in fetching the bin pointer data (requests to memory are pipelined). When there is a cache hit, the cache address where the data is located is placed into the decoupling FIFO. This allows the cache tag block to immediately start working on the next request before the data for the first request is even used. Likewise, if there is a cache miss, the request for the missed data can be made. While the request is waiting in the decoupling FIFO (for the memory latency to return the data needed), other miss requests can be processed, further optimizing the cache performance. This cache structure, however, requires special handling when an out-of-memory exception occurs.

Applicant respectfully disagrees that Chin discloses a pointer cache system further comprises a decoupling section to create a non-blocking pointer cache system. In particular, the cache does not provide for non-blocking as claimed in the invention.

It is therefore respectfully requested that the Examiner withdraw his rejection of the pending claims.



CONCLUSION

In view of the foregoing, it is respectfully asserted that all of the claims pending in this patent application are in condition for allowance.

The required fee for a one month extension of time is enclosed. Should it be determined that an additional fee is due under 37 CFR §§1.16 or 1.17, or any excess fee has been received, please charge that fee or credit the amount of overcharge to deposit account #02-2666.

If the Examiner has any questions, she is invited to contact the undersigned at (310) 252-7605. Reconsideration of this patent application and early allowance of all the claims is respectfully requested.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to: Mail Stop Fee Amendment, Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450 on December 31, 2003.

Margaux Rodriguez
December 31, 2003